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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,558	04/02/2004	Horst Hoffmann	H 5341	3798

423 7590 04/01/2005

HENKEL CORPORATION  
THE TRIAD, SUITE 200  
2200 RENAISSANCE BLVD.  
GULPH MILLS, PA 19406

EXAMINER
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BISSETT, MELANIE D

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/817,558	<b>Applicant(s)</b> HOFFMANN ET AL.	
	<b>Examiner</b> Melanie D. Bissett	<b>Art Unit</b> 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 10, 11, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

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***Claim Objections***

1. Claim 5 is objected to because of the following informalities: The applicant appears to have made a typographical error omitting the word "percent" after "2 to 8 weight" in line 5 of the claim. Appropriate correction is required.

***Specification***

2. The abstract of the disclosure is objected to because the abstract does not close with a period. Correction is required. See MPEP § 608.01(b).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Henkel. Henkel (WO 99/28363) can be found on the applicant's Form PTO-1449.
5. Henkel discloses moisture-curable hot melt polyurethane adhesives comprising reaction products of polyisocyanates and hydroxyl-containing low molecular weight polymers derived from ethylenically unsaturated monomers (abstract). Prepolymers are made by reacting the polyisocyanate with polyether polyols, polyester polyols, and/or aromatic polyols (p. 10 lines 5-7), where polyether polyols have molecular weights of 200-10,000 and preferably 400-6,000 (p. 10 lines 8-25). Mixtures of crystalline and

amorphous polyesters are used (p. 11 lines 27-29). Example 2 shows an adhesive comprising the reaction product of two polypropylene glycols, a hydroxyl group-containing acrylic resin, an MDI mixture, and a poly(hexane adipate) diol crystalline polyester diol. The polypropylene glycols have molecular weights of 1000 and about 2000, where a molecular weight of 1000 is within experimental error of "below 1000." Tackifying resins are used, including those containing active hydrogen groups (p. 14 lines 25-27; p. 15 lines 30-31).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. in view of Henkel.

8. Schneider teaches multilayer thermoformable composite veneer films to be heated and applied to shaped wood parts, wood boards, plasterboard, metal, or metal sheets (abstract; col. 2 lines 31-46). Hot-melt polyurethane adhesives are used to apply the films to the substrates (col. 8 lines 12-22; examples). Several of the layers of the film may contain poly(meth)acrylate materials (col. 4 lines 24-41; col. 5 lines 14-28; col. 5 lines 42-65), demonstrating the application of an acrylate-containing film to a substrate via polyurethane hot-melt adhesive. The exterior layer is pre-treated by

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corona treatment to aid the adhesion of the bonding layer (col. 7 lines 45-50). However, the reference does not disclose the applicant's specific adhesive composition. Henkel applies as above, teaching moisture-cured hot melt polyurethane adhesives having improved heat resistance, moisture resistance, and solvent resistance when applied to wood substrates (p. 18 lines 3-12). Thus, it would have been prima facie obvious to use the hot-melt adhesives of Henkel's invention as the bonding layer in Schneider's articles to provide improved heat resistance, moisture resistance, and solvent resistance.

9. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fields et al. in view of Henkel.

10. Fields discloses flexible, weatherable decorative sheet materials comprising color coats, clear coats, adhesives, and a thermoformable backing (figures 4-5). Both pigmented and colorless paint films are formed from alloys containing methacrylate polymers (col. 6 line 26-col. 7 line 15; example). Adhesives used to attach the paint films to a thermoformable backing include urethane adhesives (col. 7 lines 46-51), and thermoformable backings include ABS, PVC, and polypropylene (col. 8 lines 25-34). However, the reference does not disclose the applicant's specific adhesive composition. Henkel applies as above, teaching moisture-cured hot melt polyurethane adhesives having improved heat resistance, moisture resistance, and solvent resistance when applied to thermoplastic substrates (p. 18 lines 3-12; p. 23 lines 5-15). Thus, it would have been prima facie obvious to use the hot-melt adhesives of Henkel's invention as

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the bonding layer in Schneider's articles to provide improved heat resistance, moisture resistance, and solvent resistance.

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. in view of Henkel as applied to claims 7 and 12-15 above, and further in view of Kokrhanek.

12. Schneider and Henkel apply as above, teaching the application of synthetic veneers to wood parts but failing to teach a pretreatment step for the wood before the veneers are applied. Kokrhanek teaches that primer layers are used on the wood layers to promote adhesion of the bonding layer (col. 7 lines 6-21). It is the examiner's position that it would have been prima facie obvious to use primer layers in the inventions of Schneider and Henkel to promote the adhesion of the bonding layers.

***Allowable Subject Matter***

13. Claims 5-6, 10-11, and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter:

15. The closest prior art, Henkel, discloses moisture-curable hot melt polyurethane adhesives comprising reaction products of polyisocyanates and hydroxyl-containing low molecular weight polymers derived from ethylenically unsaturated monomers. Although

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the reference suggests MDI, polypropylene glycols, crystalline polyesters, low molecular weight polymers, and tackifiers, the reference does not suggest the specific amounts and molecular weights of all of the claimed components. It is the examiner's position that the specific claimed compositions would provide a novel and unobvious step over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melanie D. Bissett  
Patent Examiner  
Art Unit 1711

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